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GenCore version 4.5

OM nucleic - nucleic search, using sw model

Run on: March 8, 2002, 21:47:54 ; Search time 755.06 Seconds
(without alignments)
27.251 Million cell updates/sec

Title: US-09-851-670-2
Perfect score: 24
Sequence: 1 cgacaaatggaaaaaacagtcgcc 24

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 930621 seqs, 428662619 residues

Post-processing: Minimum Match 0%
Maximum DB seq Length: 0

Total number of hits satisfying chosen parameters: 1026190
Listing first 45 summaries

Minimum DB seq length: 0
Maximum DB seq Length: 60

Database : N_Geneseq_1101:*

1: /SIDS2/gcadata/geneseq/geneseq/geneseq/NA1980.DAT:*

2: /SIDS2/gcadata/geneseq/geneseq/geneseq/NA1981.DAT:*

3: /SIDS2/gcadata/geneseq/geneseq/geneseq/NA1982.DAT:*

4: /SIDS2/gcadata/geneseq/geneseq/geneseq/NA1983.DAT:*

5: /SIDS2/gcadata/geneseq/geneseq/geneseq/NA1984.DAT:*

6: /SIDS2/gcadata/geneseq/geneseq/NA1985.DAT:*

7: /SIDS2/gcadata/geneseq/geneseq/NA1986.DAT:*

8: /SIDS2/gcadata/geneseq/geneseq/NA1987.DAT:*

9: /SIDS2/gcadata/geneseq/geneseq/NA1988.DAT:*

10: /SIDS2/gcadata/geneseq/geneseq/NA1989.DAT:*

11: /SIDS2/gcadata/geneseq/geneseq/NA1990.DAT:*

12: /SIDS2/gcadata/geneseq/geneseq/NA1991.DAT:*

13: /SIDS2/gcadata/geneseq/geneseq/NA1992.DAT:*

14: /SIDS2/gcadata/geneseq/geneseq/NA1993.DAT:*

15: /SIDS2/gcadata/geneseq/geneseq/NA1994.DAT:*

16: /SIDS2/gcadata/geneseq/geneseq/NA1995.DAT:*

17: /SIDS2/gcadata/geneseq/geneseq/NA1996.DAT:*

18: /SIDS2/gcadata/geneseq/geneseq/NA1997.DAT:*

19: /SIDS2/gcadata/geneseq/geneseq/NA1998.DAT:*

20: /SIDS2/gcadata/geneseq/geneseq/NA2000.DAT:*

21: /SIDS2/gcadata/geneseq/geneseq/NA2001.DAT:*

22: /SIDS2/gcadata/geneseq/geneseq/NA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query	Length	DB ID	Description
C 1	15.2	63.3	25	AAc92017	PCR primer OJL03.
C 2	14.6	60.8	42	AQ038136	Mycobacterium 23S
C 3	14.6	60.8	58	AQ084428	Mycobacterium fort
C 4	14.2	59.2	19	AaA662033	Human HPC2 cDNA se
C 5	14.2	59.2	31	AX06288	Human biallelic po
C 6	14.2	59.2	42	AX29133	B. subtillis HPS1P
C 7	14.2	59.2	45	AX48588	Human chromosome 1
C 8	14.2	59.2	53	AKH36592	Human colon cancer
C 9	14	58.3	30	AKX9037	Human Factor VIII
10	14	58.3	30	AAC67914	Human Factor VIII
11	14	58.3	30	AAC67925	Human TFIIXII oligo

ALIGNMENTS

RESULT	1	TD	AAC92017/C	AAC92017 standard; DNA; 25 BP.
AC	AAC92017;	XX	XX	XX
DT	21-MAR-2001 (first entry)	XX	XX	XX
DE	PCR primer OJL03.	XX	XX	XX
KW	Heterologous gene expression; transposase; Mos1; mariner-like transposon; PCR primer; ss.	XX	XX	XX
OS	Drosophila mauritiana.	XX	XX	XX
PP	WO200073510-A1.	XX	XX	XX
PD	07-DEC-2000.	XX	XX	XX
XX	01-JUN-2000; 2000WO-US40091.	XX	XX	XX
PR	01-JUN-1999; 99US-0136972.	XX	XX	XX
PA	(UTAH) UNIV UTAH RES FOUND.	XX	XX	XX
PT	Bessereau J, Jorgensen E;	XX	XX	XX
WP1;	2001-080477/09.	DR	DR	DR
PT	Regulating expression of heterologous gene in <i>Caenorhabditis elegans</i> involves inserting transgene construct comprising heterologous gene, especially transposase gene into <i>C.elegans</i>	XX	XX	XX

SNP containing pro
Neisseria ORF 121
N. meningitidis OR
Neisseria ORF PCR
Neisseria species
Human map-related
Human single nucle
HIV-1 gag probe
probe for detection
probe for HIV-1 vi
Nucleotide fragment
Oligo primer A089/
KEX2C 3' PCR prime
Human map-related
Primer used to det
Plasmid pAMG21 hrg
Mutagenic PCR prim
Arabidopsis thalia
Prostatic specific
Snapdragon flavono
Human HML-24 antig
Human HML-24 prote
Clostridium botuli
Maize polymorphic
Rat neurodop 1 gen
TCR alpha beta cDN
STE20-like protein
Human polymorphic
Human ATM gene exo
Polymorphic fragme
Primer for amplify
FRAP 3' fragment p

Example 3; Page 18; 48pp; English.

XX
 CC The present invention relates to a method for regulating expression of a
 CC heterologous gene, into *Caenorhabditis elegans*, which involves inserting
 CC a transgene construct comprising a heterologous gene, preferably a
 CC transposase gene, into *C. elegans*. The transposon used in the method is
 CC preferably Mos1, a Mariner-like transposon isolated from *Drosophila*
 CC mauritiana. The present sequence is a PCR primer for Mos1, used in the
 XX method of the present invention.

Sequence 25 BP; 2 A; 3 C; 8 G; 12 T; 0 other;

SQ

Query Match

Best Local Similarity 63.3%; Score 15.2; DB 22; Length 25;
 Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Oy 4 caaatggaaaaacgctcg 23
 DB 23 CAACGCAAAACACTCCG 4

RESULT 2

AAQ38136 standard; DNA; 42 BP.

XX

AC AAQ38136;

XX

DT 01-JUL-1993 (first entry)

XX

DE Mycobacterium 23S rRNA primer/probe #29.

XX

KW Primer; probe; 16S; 23S; rRNA; Mycobacteria; subgeneric; class;

XX

KW rDNA; hybridisation; amplify; PCR; ss.

XX

OS Synthetic.

XX

XX WO304201-A.

XX

PD 04-MAR-1993.

XX

PF 13-AUG-1992; 92WO-US06821.

XX

PR 13-AUG-1991; 91US-0744282.

XX

PA (STAD) AMOCO CORP.

XX

PT Liu J, Nietupski RM, Shah JS;

XX

DR WPI; 1993-094025/11.

XX

PT Oligo-nucleotide(s) complementary to Mycobacterial ribosomal RNA.
 PT or DNA - used for detection and identification of Mycobacterial
 PT in hybridisation and amplification assays

XX

PS Claim 4; Page 18; 121pp; English.

XX

CC The sequences given in AAQ38150-46 are primer/probes which correspond
 CC to regions of the 16S and 23S rRNA of Mycobacterial sp. and members
 CC of subgeneric classes. These oligomers hybridise under assay
 CC conditions to rRNA/rDNA from >90% of common mycobacterium sp., these
 CC oligomers are substantially inclusive. The primer/probe sequences
 CC given in AAQ38150-59 hybridise to >10% of other bacterial sp., these are
 CC non-exclusive. All these oligomers can be used to detect Mycobacterium
 XX and their subgeneric classes by hybridisation or by amplification.

Sequence 42 BP; 13 A; 14 C; 9 G; 6 T; 0 other;

SQ

Query Match 60.8%; Score 14.6; DB 16; Length 58;
 Best Local Similarity 81.0%; Pred. No. 1.2e+03;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Oy 3 acaaatggaaaaacacgtcgc 23

Db 22 agaaatggaaaaacacgtcgc 42

RESULT 3

AAQ8428/C ID AAQ8428 standard; rRNA; 58 BP.

XX

AC AAQ8428;

XX

DT 02-OCT-1995 (first entry)

XX

DE Mycobacterium fortuitum 23S rRNA variable region probe 50.
 XX KW Mycobacterium; species-specific; detection; ribosomal RNA; 23S rRNA;

XX KW variable region; probe; ss.

OS Mycobacterium fortuitum.

XX

PN WO9503412-A.

XX

PD 02-FEB-1995.

XX

PF 22-JUL-1994; 94WO-FR00929.

XX

PR 23-JUL-1993; 93FR-0009318.

XX

PA (INR) BIO MERIEUX.

XX

PI Christen R, Mabilat C;

XX

DR MPI; 1995-075238/10.

XX

PT Single stranded nucleic acid fragments specific for particular
 PT Mycobacterium species - useful as probes and primers for
 PT detection, identification and amplification, also for therapy,
 derived from variable regions of 23S ribosomal RNA

XX

PS Claim 7; Page 69; 216pp; French.

XX

CC This sequence is from a variable region of 23S rRNA from
 CC Mycobacterium fortuitum. It is useful as a probe for species-

CC specific identification of Mycobacteria, pref. in a sandwich assay.

CC The variable regions were identified by comparison of the 23S rRNA
 CC from many Mycobacterial species; this sequence is from the region
 CC corresp. to nucleotides 289-290 in *E.coli* 23S rRNA.

XX

SQ Sequence 58 BP; 10 A; 9 C; 20 G; 19 U; 0 other;

XX

Query Match 60.8%; Score 14.6; DB 16; Length 58;
 Best Local Similarity 81.0%; Pred. No. 1.3e+03;
 Matches 17; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Oy 3 acaaatggaaaaacacgtcgc 23
 DB 26 AGACTGGAAAAACAGGTCCC 6

RESULT 4

AAA60233 ID AAA60233 standard; DNA; 19 BP.

XX

AC AAA60233;

XX

DT 07-DEC-2000 (first entry)

XX

DE Human HPC2 cDNA sequencing primer SEQ ID NO: 54.

XX

KW Human; mouse; prostate cancer predisposing gene; HPC2;

KW human chromosome 17p; gene therapy; peptide therapy; drug design;

XX

PT or genetic mapping of phenotypic traits
 XX
 PN
 WO2000037864-A1.
 XX
 PD 18-MAY-2000.
 PF 05-NOV-1999; 99WO-US26055.
 XX
 PR 06-NOV-1998; 98US-0107468.
 XX
 PA (MYRI-) MYRIAD GENETICS INC.
 XX
 PI Tavtigian SV, Teng DHF, Simard J, Rommens JM;
 DR WPI; 2000-376481/32.
 XX
 XX
 PT Human prostate cancer (HPC)2 nucleic acids, polypeptides, and
 antibodies, useful for treatment and diagnosis of prostate cancer -
 XX
 PS Example 3; Page 56; 157PP; English.
 XX
 CC The present sequence is a primer used in the isolation of the human
 CC and murine prostate cancer predisposing genes HPC2 and Mn.HPC2. The human
 CC version of the gene is found on chromosome 17P. Some alleles cause a
 CC predisposition to cancer, particularly prostate cancer. This gene and its
 CC protein can be used in peptide and gene therapy for cancer patients, as
 CC well as being useful as diagnostic tools (both for cancer sufferers and
 CC those with a predisposition to the disease) and in the production of
 CC cancer drugs.
 XX
 SQ Sequence 19 BP; 8 A; 5 C; 3 G; 3 T; 0 other;

Query	Match	Score	Length
QY	4 caaatggaaaaacagtcg 22	14.2;	21;
Db	1 caactggaaaaataccctcg 19	7e+03;	

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

RESULT 5
 AAX06288
 ID AAX06288 standard; DNA; 31 BP.
 XX
 AC AAX06288;
 XX
 DT 31-MAR-1999 (first entry)
 DE Human biallelic polymorphic DNA fragment SGC30827.
 XX
 KW Polymorphism; biallelic; Paternity testing; forensic; genetic mapping;
 KW phenotypic typing; medicament; disease; marker; human; ss.
 OS Homo sapiens.
 XX
 PN WO9858529-A2.
 XX
 PD 30-DEC-1998.
 XX
 PF 22-JUN-1998; 98WO-US12930.
 XX
 PR 24-JUN-1997; 97US-0050594.
 XX
 PA (AFFY-) AFFYMETRIX INC.
 XX
 PI Berno A, Chee M, Fan J, Lipshutz RJ;
 XX
 WPI; 1999-080963/07.
 XX
 PT New nucleic acid segments containing polymorphic sites - used for,
 e.g. detecting a disease phenotype, in forensics, paternity testing

PT or genetic mapping of phenotypic traits
 XX
 PS Claim 1; Page 19; 61PP; English.
 XX
 CC Sequences AAX06101-X06558 represent human DNA fragments which contain
 CC biallelic polymorphic markers. The base occupying the polymorphic site
 CC is indicated by the appropriate IUPAC-IUB ambiguity code. These
 CC fragments can be used in a method for determining polymorphic forms in
 CC an individual. The invention further provides computer-readable storage
 CC medium for storing data for access by an application programme being
 CC executed on a data processing system. Such a method comprises a data
 CC structure stored in the computer-readable storage medium, the data
 CC structure including information resident in a database used by the
 CC application programme and including records, each record comprising
 CC information identifying a polymorphism shown in the above sequences. The
 CC products and methods can be used for analysing polymorphic sites in
 CC individuals for testing for the presence of a disease phenotype or in
 CC forensics, paternity testing or genetic mapping of phenotypic traits.
 CC They can also be used for the production of transgenic animals. The nucleic
 CC acid segments can also be used in the manufacture of medicaments for the
 CC treatment or prophylaxis of diseases.

XX
 SQ Sequence 31 BP; 11 A; 5 C; 7 G; 7 T; 1 other;

Query	Match	Score	Length
QY	1 cggacaatggaaaaacagctc 21	14.2;	20;
Db	1 ctccataggataaasagctc 21	7e+03;	

Matches 16; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

RESULT 6
 AAZ9133
 ID AAZ9133 standard; DNA; 42 BP.
 XX
 AC AAZ9133;
 XX
 DT 21-JUN-2000 (first entry)
 DE B. subtilis HPS/HPI genes primer Bsyck-61.
 XX
 KW Hexulose-phosphate synthase; HPS; hexulose phosphate isomerase; HPI;
 KW glucose 6-phosphate; methanol; PCR primer; ss.
 XX
 OS Bacillus subtilis.
 XX
 PN JP2000041663-A.
 XX
 PD 15-FEB-2000.
 XX
 PF 04-AUG-1998; 98JP-0220881.
 XX
 PR 04-AUG-1998; 98JP-0220881.
 XX
 PA (AJIN) AJINOMOTO KK.
 XX
 DR WPI; 2000-274044/24.
 XX
 PT Preparation of hexulose-phosphate synthase and hexulose-phosphate
 PT isomerase for preparation of 1-13C D-glucose 6-phosphate from
 PT C13-labeled methanol -
 XX
 PS Examples; Page 10; 15PP; Japanese.

XX
 CC The invention relates to a novel DNA fragment containing the
 CC hexulose-phosphate synthase (HPS) and hexulose phosphate isomerase
 CC (HPI) coding sequences (AAZ9132). This sequence represents a PCR primer
 CC used to isolate these genes. HPS or HPS and HPI are used for the
 CC preparation of C13-D-glucose 6-phosphate from C13-labelled methanol.

CC and mania gene can be used to treat mood disorders and related disorders.

QY 6 aatggaaaaaacagtcctccc 24
 ||| ||||| | | | | | | | | | |
 XX DE Human Factor VIII oligonucleotide FVIII ATG.
 ID ID AAA99037 standard; DNA; 30 BP.
 XX KW Human; FVIII; Factor VIII; gene therapy; Factor IX intron 1;
 AC AC AAA99037;
 XX KW Factor VIII production; PCR primer; ss.
 DT 17-JAN-2001 (first entry)
 XX DE Human Factor VIII PCR fragment oligonucleotide SEQ ID NO:1.
 XX KW Human; Factor VIII; FVIII; Factor IX truncated intron 1; FIX T1;
 KW B-domain; modification; gene therapy; PCR; haemostatic;
 KW haemophilia A; ss.
 XX OS Homo sapiens.
 XX DR Homo sapiens.
 PN EP1038959-A1.
 XX PD 27-SEP-2000.
 PF 17-MAR-1999; 99EP-0104050.
 PR 17-MAR-1999; 99EP-0104050.
 PA (AVET) AVENTIS BEHRING GMBH.
 XX PI Negrier C, Plantier JL;
 XX DR WPI; 2000-603721/58.
 PT Novel modified factor VIII cDNA for use in gene therapy, in which the
 PT wild-type factor VIII cDNA B-domain is deleted and truncated factor IX
 PT intron 1 is inserted in one or more locations -
 XX Disclosure; Page 7; 17pp; English.
 XX CC The present invention describes a modified Factor VIII cDNA (I)
 CC characterised in that the B-domain of wild-type FVIII cDNA has
 CC been deleted and a truncated Factor IX intron 1 (FIX T1) has been
 CC inserted in one or more locations of FVIII cDNA. Also described
 CC are: (1) producing FVIII in a cell line containing (I); and
 CC (2) a transfer vector for use in gene therapy comprising (I). (I) has
 CC haemostatic activity, and can be used in gene therapy comprising (I) is used in
 CC a transfer vector for gene therapy and for a higher yield in vitro
 CC production of FVIII, which is used for treating haemophilia A.
 CC The present sequence represents a FVIII PCR fragment oligonucleotide which
 CC is used in the exemplification of the present invention.
 XX SQ sequence 30 BP; 9 A; 11 C; 5 G; 5 T; 0 other;

Query Match 58.3%; Score 14; DB 21; Length 30;
 Best Local Similarity 77.3%; Pred. No. 2.2e+03; Mismatches 5; Indels 0; Gaps 0;
 Matches 17; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 3 accaatggaaaaaacagtcctccc 24
 ||| ||||| | | | | | | | | | |
 Db 3 acccatggaaatagactcc 24

RESULT 11 AAC67925 standard; DNA; 30 BP.
 ID AAC67925
 XX AC AAC67925;
 XX DT 19-FEB-2001 (first entry)
 XX DE Human TFIXX1 oligonucleotide FVIII ATG.
 XX KW Human; FVIII; Factor VIII; gene therapy; truncated Factor IX intron 1;
 KW TFIXX1; PCR primer; ss.
 OS Homo sapiens.
 XX PN EP1048726-A2.
 XX PD 03-MAR-2000; 2000EP-0104677.
 XX PR 29-APR-1999; 99EP-0107397.
 PA (CENT-) CENTENEON PHARMA GMBH.
 PT Negrier C, Plantier JL;
 XX DR WPI; 2001-072945/09.

PT Modified Factor VIII cDNA comprising a truncated Factor IX intron 1
 PT sequence inserted at one or more locations, useful for efficient
 PT production of Factor VIII in host cells -
 XX PS Disclosure; Page 9; 19pp; English.

CC The present sequence is used in an invention relating to a modified
 CC Factor VIII cDNA having a truncated Factor IX intron 1 inserted in one or
 CC more places. The cDNA encodes a mutated Factor VIII, where the wild type
 CC B domain has been deleted. The modified Factor VIII cDNA is used to
 CC generate Factor VIII protein in vitro. The cDNA is used in a transfer
 CC vector for gene therapy. The modification allows increased production of
 CC Factor VIII. Truncated Factor VIII cDNA with an insertion of the Factor
 CC IX intron 1 in intron 1 and 12 and in intron 1 and 13 gave 2-3 and 8-9
 CC times more Factor VIII than unmodified Factor VIII cDNA.
 XX SQ Sequence 30 BP; 9 A; 11 C; 5 G; 5 T; 0 other;

Query Match 58.3%; Score 14; DB 22; Length 30;
 Best Local Similarity 77.3%; Pred. No. 2.2e+03; Mismatches 5; Indels 0; Gaps 0;
 Matches 17; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 3 accaatggaaaaaacagtcggc 24
 ||| ||||| | | | | | | | | | |
 Db 3 acccatggaaatagactcc 24

RESULT 11 AAC67925 standard; DNA; 30 BP.
 ID AAC67925
 XX AC AAC67925;
 XX DT 19-FEB-2001 (first entry)
 XX DE Human TFIXX1 oligonucleotide FVIII ATG.
 XX KW Human; FVIII; Factor VIII; gene therapy; truncated Factor IX intron 1;
 KW TFIXX1; PCR primer; ss.
 OS Homo sapiens.
 XX PN EP1048726-A2.
 XX PD 02-NOV-2000.
 XX PR 03-MAR-2000; 2000EP-0104677.
 XX PR 29-APR-1999; 99EP-0107397.
 XX DT 19-FEB-2001 (first entry)

RESULT 10 AAC67914
 ID AAC67914 standard; DNA; 30 BP.
 XX AC AAC67914;
 XX PR 29-APR-1999; 99EP-0107397.

PA (CENT-) CENTENEON PHARMA GMBH.
 XX
 PT Negrier C, Plantier JL;
 XX DR WPI; 2001-072945/09.
 XX
 PT Modified Factor VIII cDNA comprising a truncated factor IX intron 1
 PT sequence inserted at one or more locations, useful for efficient
 production of Factor VIII in host cells -
 XX
 PS Disclosure; Page 12; 19pp; English.
 XX
 CC The present sequence was used for introducing truncated Factor IX intron 1
 CC into a Factor VIII cDNA sequence. The resulting cDNA encodes a mutated
 CC Factor VIII, where the wild type B domain has been deleted. The modified
 CC Factor VIII cDNA is used to generate Factor VIII protein in vitro. The
 CC cDNA is used in a transfer vector for gene therapy. The modification
 CC allows increased production of Factor VIII. Truncated Factor VIII cDNA
 CC with an insertion of the Factor IX intron 1 and 12 and in
 CC intron 1 and 13 gave 2-3 and 8-9 times more Factor VIII than unmodified
 CC Factor VIII cDNA.
 XX
 Sequence 30 BP: 9 A; 11 C; 5 G; 5 T; 0 other;

CC for novel human protein kinases where a single nucleotide polymorphism (SNP) has been identified. The SNP occurs at the last position of the present sequence. The sequences are described relating to the invention of novel human protein kinases #1-57 (RAU03501-RAU0557). The novel protein kinases have been identified as members of the tyrosine or serine/threonine kinase (PTK and STK) families. The polynucleotides encoding protein kinases and the polypeptides may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate kinase expression. For example, they may be used to treat cancers (especially cancers of haematopoietic origin), cardiovascular disease (e.g. atherosclerosis), metabolic disorders (e.g. diabetes), immune related diseases (e.g. rheumatoid arthritis), neurological disorders (e.g. schizophrenia), neurodegenerative disorders (e.g. Parkinson's disease), inflammatory disorders (e.g. asthma), infectious disease (e.g. HIV) and reproductive disorders (e.g. infertility). Additionally, polynucleotides encoding protein kinases may be used for gene therapy and as DNA probes in diagnostic assays. The protein kinase polypeptides may be used as antigens in the production of antibodies against the protein kinases and in assays to identify modulators of protein kinase expression and activity.

XX SNP containing protein kinase DNA sequence #61.
 KW Human; protein kinase; PTK; STK; cancer; cardiovascular disease; SNP;
 KW metabolic disorder; immune related disease; neurological disorder;
 KW neurodegenerative disorder; inflammatory disorder; infectious disease;
 KW reproductive disorder; gene therapy; single nucleotide polymorphism; ds.
 XX OS Homo sapiens.
 XX WO200138503-A2.
 XX PN
 XX PD 31-MAY-2001.
 XX PF 22-NOV-2000; 2000WO-US32085.
 XX PR 24-NOV-1999; 99US-0167482.
 XX PA (SUGE-) SUGEN INC.
 XX PI Plowman GD, Whyte D, Manning G, Sudarsanam S, Martinez R;
 PT Flanagan P, Clary D;
 PT DR WPI; 2001-34395/36.
 XX Nucleic acids encoding human kinase polypeptides, useful for preventing
 PT diagnosing and/or treating e.g. cancer, immune, cardiovascular and
 PT neuronal-associated diseases, and microbial infections -
 XX PS Example 8B; Page 334; 433PP; English.
 XX AAS06832-AAS06897 represent part of a polynucleotide sequence encoding

AC AAF21597;
 XX
 XX
 DT 13-MAR-2001 (first entry)
 DE Neisseria ORF 121 PCR primer SEQ ID NO:98.
 XX
 KW *Neisseria meningitidis*; *Neisseria gonorrhoeae*; immunogenic; vaccine;
 KW diagnosis; antigen; detection; infection; gene therapy; antibacterial;
 KW PCR primer; ss.
 XX
 OS *Neisseria* sp.
 XX
 PN WO200666791-A1.
 XX
 PD 09-NOV-2000.
 PF 08-MAR-2000; 2000WO-US05928.
 XX
 PR 30-APR-1999; 99US-0132069.
 PR 08-OCT-1999; 99WO-US23573.
 PR 28-FEB-2000; 2000GB-0004695.
 XX
 PA (CHIR) CHIRON CORP.
 PA (GENO-) INST GENOMIC RES.
 XX
 PI Pizza M, Hickey E, Peterson J, Tettelin H, Venter JC, Masignani V;
 PI Galeotti C, Mora M, Ratti G, Scarselli M, Scariato V, Rappuoli R;
 PI Frazer CM, Grandi G;
 XX
 DR WPI; 2000-647603/62.
 XX
 PT *Neisseria meningitidis* B full length genome sequence and open reading
 PT frames are used to detect, treat and prevent *Neisseria* infections -
 XX
 Example 1; Page 116; 692pp; English.

CC The present invention describes the full length genome of
 CC *Neisseria meningitidis* B (NMB). The sequences in AAF21544 and AAF21607
 CC to AAF21613 represent fragments of the NMB genomic sequence, as the
 CC sequence was too long to go in a record on its own it was split into 8
 CC sequences which overlap each other at the beginning and end of each
 CC sequence by 49980 bp (i.e. the last 49980 bp of AAF21544 is repeated at
 CC the beginning of AAF21607, the last 49980 bp of AAF21607 are repeated at
 CC the beginning of AAF21608, and so on). AAF21545 to AAF2158 encode the
 CC *Neisseria* proteins given in AAB5555 to AAB5593, and AAF21589 to
 CC AAF21606 represent PCR primers which are used in the exemplification of
 CC the present invention. The NMB genome and fragments from it have
 CC antibacterial activity, and can be used in vaccines and gene therapy.
 CC *Neisseria* nucleic acids, proteins and/or antibodies which binds to a
 CC proteins can be used in compositions for treating or preventing infection
 CC due to *Neisseria* bacteria or as a diagnostic reagent for detecting the
 CC presence of *Neisseria* bacteria or of antibodies raised to *Neisseria*
 CC bacteria. Computers, computer memory, computer storage medium or computer
 CC databases can be used in a search to identify open reading frames (ORFs)
 CC or coding sequences within the NMB genome. The DNA sequences provide
 CC further opportunities to find antigenic or immunogenic proteins which are
 CC more effective in vaccines than the outer membrane proteins currently
 CC used.

SQ Sequence 32 BP; 10 A; 9 C; 6 G; 7 T; 0 other;

Query Match 57.5%; Score 13:8; DB 21; Length 32;
 Best Local Similarity 88.2%; Pred. No. 2.7e+03; Mismatches 15; Conservative 0; Indels 0; Gaps 0;

QY 4 caaatgaaaaacagct 20
 ||| | | | | | | | | | |
 Db 10 catatggaaacacagct. 26

RESULT 14

AAA81312
 ID AAA81312 standard; DNA; 32 BP.

XX
 AC
 XX
 DT 04-DEC-2000 (first entry)

DE N. meningitidis ORP121 PCR primer SEQ ID NO:1058.
 XX
 KW Neisseria meningitidis; *Neisseria gonorrhoeae*; genome; immunogenic;
 KW antigen; vaccine; diagnosis; infection; antibacterial; identification;
 KW Meningococcus B; MenB; PCR primer; ss.

OS Neisseria meningitidis.

XX WO200022430-A2.
 XX
 PD 20-APR-2000.
 XX
 PP 08-OCT-1999; 99WO-US23573.
 XX
 PR 09-OCT-1998; 98US-0103794.
 PR 30-APR-1999; 99US-0132068.

XX
 PA (CIR) CHIRON CORP.
 XX
 PT Frazer CM, Hickey E, Peterson JR, Tettelein H, Venter JC, Scarlato V;
 PI Massignani V, Galeotti C, Mora M, Ratti G, Scarselli M, Scarlato V;
 PI Rapuoli R, Pizza M;
 XX DR WPPI; 2000-318079/27.

XX The present invention describes methods of obtaining immunogenic
 CC proteins from *Neisseria* genomic sequences. AAB81453 to AAB82114
 CC represent specifically claimed *Neisseria meningitidis* genomic DNA
 CC sequences; AAA81260 to AAA81303 and AAB25620 to AAB25663 represent
 CC *Neisseria* DNA sequences and their corresponding proteins; AAA81254 to
 CC AAA81259 and AAA81304 to AAA81321 represent PCR primers used in the
 CC isolation of *Neisseria meningitidis* DNA sequences; and AAA81322 to
 CC AAA81452 represent *Neisseria meningitidis* MenB polynucleotide ORF
 CC sequences, which are all used in the exemplification of the present
 CC invention. The nucleic acid sequences, protein sequences, and antibodies
 CC against them, can be used in the manufacture of a composition. The
 CC composition can be used as a medicament (or in the manufacture of a
 CC medicament) for treating, preventing or diagnosing infection due to
 CC *Neisseria* bacteria. For example, some of the identified proteins could
 CC be components of vaccines against *Neisseriae*. Identification of sequences
 CC and/or against all pathogenic *Neisseriae*. Identification of sequences
 CC from the bacterium will also facilitate production of biological probes,
 CC particularly organism-specific probes. Attempts to make efficacious
 CC *Meningococcus* B vaccines have failed mainly due to antigen tolerance.
 CC Multivalent vaccines have also been tried but none have successfully
 CC overcome antigenic variability. The provision of further, complete
 CC sequences may provide an opportunity to identify secreted or surface
 CC exposed proteins that may be presumed targets for the immune system and
 CC which are not antigenically variable or at least more conserved than
 XX

SQ Sequence 32 BP; 10 A; 9 C; 6 G; 7 T; 0 other;

Query Match 57.5%; Score 13:8; DB 21; Length 32;
 Best Local Similarity 88.2%; Pred. No. 2.7e+03; Mismatches 15; Conservative 0; Indels 0; Gaps 0;

QY 4 caaatgaaaaacagct 20
 ||| | | | | | | | | | |
 Db 10 catatggaaacacagct. 26

RESULT 15

AAZ254567
 ID AAZ254567 standard; DNA; 32 BP.

XX
 AC
 XX
 DT 21-MAR-2000 (first entry)

DE Neisseria ORF PCR primer SEQ ID NO:3029.
 XX
 KW Neisseria meningitidis; *Neisseria gonorrhoeae*; antigen; vaccine;
 KW antigenic; diagnosis; immunogenic; infection; meningitis; septicaemia;
 KW antibacterial; gene therapy; PCR primer; ss.

OS Synthetic.

OS Neisseria sp.
 XX
 PN WO957280-A2.
 XX
 PD 11-NOV-1999.
 XX
 PP 30-APR-1999; 99WO-US09346.

XX

PR 01-MAY-1998; 98US-0083758.

PR 31-JUL-1998; 98US-009869.

PR 02-SEP-1998; 98US-0098994.

PR 03-SEP-1998; 98US-0099062.

PR 09-OCT-1998; 98US-0103749.

PR 09-OCT-1998; 98US-0103794.

PR 25-FEB-1999; 99US-0121528.

XX
 PA (CHIR) INST GENOMIC RES.

PS Example 1; Page 115; 1760pp; English.

XX
 PI Fraser C, Galeotti C, Grandi G, Hickey E, Massignani V, Mora M;
 PI Petersen J, Pizza M, Rappuoli R, Ratti G, Scalato E, Scarselli M;
 PI Tettelin H, Wenter JC;
 XX
 DR WPI, 2000-062150/05.

XX
 PT Novel Neisserial polypeptides predicted to be useful antigens for
 PT vaccines and diagnostics

PS Example 1; Page 70; 1453pp; English.

XX
 CC AA253015 to AA254536, AA254577 to AA254615, and AAY4253 to AAY75941
 CC represent novel *Neisseria meningitidis* and *N. gonorrhoeae* polynucleotides
 CC and polypeptides. AA254537 to AA254576 and AA254616 to AA25473 represent
 CC PCR primers used in the exemplification of the present invention. The
 CC polypeptides, the polynucleotides, antibodies and compositions of
 CC the invention can be used as vaccines, as diagnostic reagents, and as
 CC immunogenic compositions. The polypeptides can be used in the
 CC manufacture of medicaments for treating or preventing infection due to
 CC *Neisseria* bacteria (e.g., meningitis and septicemia), to detect the
 CC presence of *Neisseria* bacteria, or to raise antibodies. They may also
 CC be used to screen for agonists or antagonists, which may themselves
 CC have use as antibacterial agents. The polynucleotides of the invention
 CC may also be used in gene therapy protocols.
 XX
 SQ Sequence 32 BP; 10 A; 9 C; 6 G; 7 T; 0 other;

Query Match 57.5%; Score 13.8; DB 21; Length 32;
 Best Local Similarity 88.2%; Pred No. 2.7e+03;
 Matches 15; Conservative 0; Mismatches 2;
 Qy 4 caaatggaaaaacgct 20
 Db 10 catatggaaacacagct 26

Search completed: March 9, 2002, 01:06:55
 Job time: 11941 sec